



IN THE UNITED STATES PATENT & TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES

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#20
K. C. H. H.
9/19/02

IN RE APPLICATION OF: Donald K. Wright et al.)
ATTY DOCKET NO.: 021276-9044) Group Art Unit: 3727
APPLICATION NO.: 09/415,696) Examiner:
FILING DATE: October 12, 1999) Jes F. Pacua
TITLE: RECLOSABLE FASTENER) Reply Brief To
PROFILE SEAL AND) Examiner's Answer
METHOD FORMING A)
FASTENER ASSEMBLY)

Assistant Commissioner For Patents
Washington, D.C. 20231

REPLY BRIEF TO EXAMINER'S ANSWER

Dear Sir/Madam:

- ☒ AUTHORIZATION TO PAY AND PETITION FOR THE ACCEPTANCE OF ANY NECESSARY FEES. If any charges or fees must be paid in connection with the following communication (including but not limited to the payment of issue fees), they may be paid out of our deposit account No. 50-1965. If this payment also requires a Petition, please construe this authorization to pay as the necessary Petition which is required to accompany the payment.
- ☐ Applicant hereby petitions the Commissioner of Patents and Trademarks to extend the time for response to the Office Action dated _____, for _____ month(s) from _____, to _____. Submitted herewith is our check No. _____, dated _____ in the amount of \$_____ to cover the cost of the extension. If the check is lost, or otherwise does not accompany this Petition, please charge our deposit account No. 50-1965 in the appropriate amount to cover the cost of the extension. Any deficiency or overpayment should be charged or credited to the above-numbered deposit account.

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This is in reply to the Examiner's Answer dated July 2, 2002, to applicant's Appeal Brief filed June 17, 2002. The Examiner has raised certain new points of argument. Check No. 17589 in the amount of \$160.00 is enclosed herewith as payment of the fee set forth in 37 C.F.R. § 1.17(c). 220

ARGUMENT

The present application describes a reclosable profile assembly of interlocking ribs, with an air tight compression molded segment seal. As set forth in applicant's second declaration of Donald K. Wright and Christopher Pemberton (§ 8), the phrase "compression molding" is a term of art that means,

[T]o compress, mold and shape the heated plastic over a sufficient period of time so as to gradually form a flattened seal which is air tight, the plastic filling all voids, while at the same time not distorting (stretching, elongating or changing the shape of) the portions of the fastener profiles which are outside the flattened seal.

Claims 1, 4-10, 18 and 19 are pending in the present application, and include independent claims 1 and 18. Independent claim 1 is directed to a "reclosable fastener profile assembly" having,

[A] compression molded segment seal portion fusing [the] ribs of [a] first profile strip and [a] second profile strip ... said fused section substantially flattened to form an airtight seal of said first and second profile strips, without distorting said ribs of said first and second profile strips outside of said fused section, thereby maintaining said airtight seal of said first and second profile strips when interlocked.

Claims 4-10 and 19 are dependent on claim 1. Independent claim 18 contains the same limitations discussed above for claim 1, but is directed to a "reclosable storage bag ... wherein said first profile strip and second profile strip are heat sealed to [a] first bag wall and [a] second bag wall, respectively."

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Reply Brief

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The Examiner has rejected independent claim 1 as anticipated by U.S. Patent Nos. 4,589,145 ("*Van Erden et al.* '145"), 5,024,537 ("*Tilman* '537") and 5,071,689 ("*Tilman* '689"). Independent claim 18 stands rejected as anticipated by *Van Erden et al.* '145 and *Tilman* '537.

Van Erden et al. '145 fails to disclose the "airtight" "compression molded segment seal" set forth in claims 1 and 18 of the present application. *Van Erden et al.* '145 describes a method for packaging a "blocky product" within a bag having a zipper "compris[ing] a pair of complementary extruded plastic multi-rib and groove interlockable strips" (col. 5, lines 28-29). During the packaging, the zipper is "provided with spot seals," for the sole purpose of ensuring that the zipper remains closed as the product is wrapped. (Col. 7, lines 6-15.) As described in the context of alternative embodiments, "zipper profiles 29 may embody techniques ... wherein the structure of the zipper profiles will resist opening force from the inside of the package to a substantially greater extent than opening force applied externally" (col. 7, lines 18-27).

Van Erden et al. '145 does not disclose or even suggest the method of forming spot seals on the zipper, nor is there any suggestion that the spot seals form an "airtight seal" as set forth in independent claims 1 and 18 of the present application. Applicant's first declaration of Donald K. Wright and Christopher Pemberton (§ 1), describes a test of several types of commercially available reclosable plastic bags, having industry standard ultrasonic spot seals. In each case, the spot seals were found to leak under vacuum and were not airtight. In addition, applicant's second declaration of Donald K. Wright and Christopher Pemberton (§ 14-15; Ex. II) shows a photograph of a spot seal on the zipper of a reclosable plastic bag. As clearly shown by the photograph, the zipper is only partially fused by the spot seal, which "is simply crushed and melted leaving voids through the seal" and, therefore, is not air tight. (*Id.* at § 11.) In contrast, the "compression molded segment seal" claimed in the present application has a structure that is

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"flattened," "air tight" and "filling all voids, while at the same time not distorting (stretching, elongating or changing the shape of) the portions of the fastener profiles which are outside the flattened seal" (First Decl. Wright & Pemberton at ¶ 8). Thus, there is no evidence to support the Examiner's assertion that *Van Erden et al.* '145 discloses or even suggests the "airtight" "compression molded segment seal" set forth in claims 1 and 18 of the present application.

Tilman '537 similarly discloses "complementary reclosable zipper strips" attached to a "carrier tape," wherein "the ends of zipper section lengths 22 are provided with spot seals ... to facilitate subsequent sealing of the ends of the strips into side seals of bags" (col. 2, lines 55-61). As in the case of *Van Erden et al.* '145, *Tilman* '537 also fails disclose or suggest the method of forming spot seals or that such seals must be airtight. Accordingly, for the same reasons discussed above, there is no evidence to support the Examiner's assertion that *Tilman* '537 discloses or even suggests the "airtight" "compression molded segment seal" set forth in claims 1 and 18 of the present application.

Van Erden et al. '689 fails to disclose the "compression molded segment seal" set forth in claim 1 of the present application. *Van Erden et al.* '689 describes "heated complementary cooperating sealing heads" (col. 2, lines 65-66), which operate on a zipper strip to form "a combination end seal and hinge" (col. 3, lines 4-5). The sole purpose of the sealing heads is to form a "hinge area" of "sufficient thinness and extent ... to permit ready folding of the zipper sections" (col. 3, lines 7-10). The joint between the zipper strip and the hinge area produced by the "sealing heads" is not distinct, but comprises an "end seal convergence connection 24 transition from the total thickness of the associated zipper section" (col. 3, lines 25-27).

Van Erden et al. '689 does not disclose or suggest that the "hinge area" formed by the sealing heads "[maintain] the airtight seal of said first and second profile strips when

interlocked” as set forth in claim 1 of the present application. Furthermore, *Van Erden et al.* ‘689 describes forming an “end seal convergence connection transition” that extends beyond the sealed area. Thus, *Van Erden et al.* ‘689 teaches away from the “compression molded segment seal” of claim 1, in which the “fused section [is] substantially flattened ... without distorting said ribs of said first and second profile strips outside of said fused section.” Accordingly, there is no evidence to support the Examiner’s assertion that *Van Erden et al.* ‘689 discloses or even suggests the “airtight” “compression molded segment seal” set forth in claim 1 of the present application.

The Examiner’s Answer argues that applicant’s first declaration of Donald K. Wright and Christopher Pemberton is insufficient to overcome the rejection of claims 1, 4-10, 18 and 19. In particular, the Examiner states that “appellant’s first declaration is silent as to why prior art bags using ultra-sonic sealers to form spot seals were selected for the comparison instead of prior art bags using heat a pressure to form spot seals” and, therefore, concludes that the declaration “fails to compare the claimed subject matter with the closest prior art.

As discussed above, neither *Van Erden et al.* ‘145 nor *Tilman* ‘537 disclose or suggest any method of forming a spot seal. Applicant’s first declaration of Donald K. Wright and Christopher Pemberton shows that reclosable bags having industry standard ultrasonic spot seals do not have airtight seals and, therefore provides evidence that neither *Van Erden et al.* ‘145 nor *Tilman* ‘537 disclose the “airtight” “compression molded segment seal” set forth in claims 1 and 18 of the present application. It should be noted that the *Van Erden et al.* ‘145 and *Tilman* ‘537 patents are assigned to ITW/MINIGRIP, which is the licensor of the ZIPLOC® packages described and shown in applicant’s first declaration. Thus, the specific references cited by the

Examiner describe spot-seals that leak, thereby failing to provide the airtight seals of the present invention.

The Examiner's Answer further argues that applicant's second declaration of Donald K. Wright and Christopher Pemberton is insufficient to over come the rejection of claims 1, 4-10, 18 and 19. In particular, the Examiner asserts that "the declaration is absent any factual support." Contrary to the Examiner's arguments, applicant's second declaration contains exhibits comparing the "compression molded segment seal" of the present application with "spot seals" as disclosed by *Van Erden et al.* '145 and *Tilman* '537. Thus, applicant's second declaration provides factual evidence that the spot seals of *Van Erden et al.* '145 and *Tilman* '537 do not have the same structure as the claimed "compression molded segment seal."

In addition, the Examiner continues to assert that *Van Erden et al.* '145, *Tilman* '537 and *Tilman* '689 disclose an "airtight seal" as set forth in claims 1 and 18 of the present application. The Examiner argues that the dictionary definition of the word "seal" is "a tight closure, against the passage of air or water" and, therefore, that the seals disclosed by the prior art are necessarily airtight. Contrary to the Examiner's unduly constrained definition, the term "seal" is broadly defined as "to confirm or make secure by or as if by a seal ... to fasten with ... to keep shut, enclosed or confined." *Webster's Third New Int'l Dictionary*, at 2047 (1986). This broader definition reflects the function of the prior art seals, which are only used to secure the halves of the zipper together during processing. Furthermore, applicant's first declaration demonstrates that the Examiner's definition is inapplicable to the prior art, inasmuch as the spot seals used in the industry are not airtight.

The Examiner further argues that *Van Erden et al.* '145, *Tilman* '537 and *Tilman* '689 disclose seals formed "without distorting the ribs" of the zipper strip, as set forth in claims 1 and

18 of the present application. The Examiner's asserts that "the profile strips of *Van Erden et al.* '145, *Tilman* '537 and *Tilman* '689 are disclosed as being openable and reclosable, so it stands to reason that the portions of the profiles outside the spot seals are without distortion." Contrary to the Examiner's conclusion, spot sealing distorts the ribs of the zipper strip outside of the fused seal, which causes the zipper strip to leak, but does not prevent opening and reclosing of the zipper strip as a whole. As shown in Exhibit II of applicant's second declaration, spot seals cause substantial deformation of the ribs outside of the seal, without preventing the opening and reclosing of the zipper strip as a whole. Thus, the Examiner has not put forth any evidence to support the conclusion that either *Van Erden et al.*, '145, *Tilman* '537 or *Tilman* '689 disclose or suggest forming seals "without distorting said ribs of said first and second profile strips outside of said fused section, thereby maintaining said airtight seal of said first and second profile strips when interlocked," as set forth in independent claims 1 and 18 of the present application.

Finally, the Examiner's Answer suggests that "Appellant's pointing out of specific structure to differentiate the compression molded seals from the prior art contradicts the arguments presented in the response file 8/8/01." The Examiner's arguments misconstrue applicant's statements in its response filed August 8, 2001. In that response, applicant argued that spot sealing and compression molding are different processes that result in different seal structures. As applicant stated,

Spot-sealing of the profile strips in the cited references does not result in the same type of seal as compression molding. ... [Spot-sealing] results in a flattened portion with pores and channels that compr[om]ise the integrity of the seal. Using compression molding ensures that an airtight seal is consistently formed at the ends of the profile strips. (Response 8/8/01 at 4.)

As such, applicant's statements in its response of August 8, 2001, are entirely consistent with its arguments on Appeal.

CONCLUSION

Applicant's main brief addressed all of the relevant issues raised by the Examiner in his final rejection, and the arguments put forth by the Examiner's Answer do not support a rejection of applicant's claims as anticipated by the cited prior art. For the foregoing reasons and for the reasons stated in applicant's main brief, it is applicant respectfully requests that this Board overrule the Examiner's rejections.

Respectfully Submitted,

Dated: _____

9/3/02

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